

10/551931

=> d his

(FILE 'HOME' ENTERED AT 14:41:29 ON 13 JUL 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007

L1 13234 S BLOOD (A)SUBSTITUTE?
L2 224 S CONJUGATED (A)HEMOGLOBIN?
L3 59596 S HSA OR (HUMAN (W)SERUM (W)ALBUMIN)
L4 5 S L2 AND L3
L5 4 DUP REM L4 (1 DUPLICATE REMOVED)
L6 2 S ALBUMIN (W)HEMOGLOBIN (W)CONJUGAT?
E SU Z/AU
L7 909 S E3
E XIULING L/AU
L8 7 S E3
E CHUNYANG Z/AU
E YUHONG X/AU
L9 3 S E3
L10 919 S L7 OR L8 OR L9
L11 0 S L2 AND L10

=>

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: sssptal652mxm

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?): 2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 3 MAR 16 CASREACT coverage extended
NEWS 4 MAR 20 MARPAT now updated daily
NEWS 5 MAR 22 LWPI reloaded
NEWS 6 MAR 30 RDISCLOSURE reloaded with enhancements
NEWS 7 APR 02 JICST-EPLUS removed from database clusters and STN
NEWS 8 APR 30 GENBANK reloaded and enhanced with Genome Project ID field
NEWS 9 APR 30 CHEMCATS enhanced with 1.2 million new records
NEWS 10 APR 30 CA/CAPLUS enhanced with 1870-1889 U.S. patent records
NEWS 11 APR 30 INPADOC replaced by INPADOCDB on STN
NEWS 12 MAY 01 New CAS web site launched
NEWS 13 MAY 08 CA/CAPLUS Indian patent publication number format defined
NEWS 14 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS 15 MAY 21 BIOSIS reloaded and enhanced with archival data
NEWS 16 MAY 21 TOXCENTER enhanced with BIOSIS reload
NEWS 17 MAY 21 CA/CAPLUS enhanced with additional kind codes for German patents
NEWS 18 MAY 22 CA/CAPLUS enhanced with IPC reclassification in Japanese patents
NEWS 19 JUN 27 CA/CAPLUS enhanced with pre-1967 CAS Registry Numbers
NEWS 20 JUN 29 STN Viewer now available
NEWS 21 JUN 29 STN Express, Version 8.2, now available
NEWS 22 JUL 02 LEMBASE coverage updated
NEWS 23 JUL 02 LMEDLINE coverage updated
NEWS 24 JUL 02 SCISEARCH enhanced with complete author names
NEWS 25 JUL 02 CHEMCATS accession numbers revised
NEWS 26 JUL 02 CA/CAPLUS enhanced with utility model patents from China

NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:41:29 ON 13 JUL 2007

```
=> file medline embase biosis biotechds scisearch hcaplus ntis lifesci
COST IN U.S. DOLLARS                               SINCE FILE      TOTAL
                                                    ENTRY      SESSION
FULL ESTIMATED COST                               0.21         0.21
```

FILE 'MEDLINE' ENTERED AT 14:42:13 ON 13 JUL 2007

FILE 'EMBASE' ENTERED AT 14:42:13 ON 13 JUL 2007
Copyright (c) 2007 Elsevier B.V. All rights reserved.

FILE 'BIOSIS' ENTERED AT 14:42:13 ON 13 JUL 2007
Copyright (c) 2007 The Thomson Corporation

FILE 'BIOTECHDS' ENTERED AT 14:42:13 ON 13 JUL 2007
COPYRIGHT (C) 2007 THE THOMSON CORPORATION

FILE 'SCISEARCH' ENTERED AT 14:42:13 ON 13 JUL 2007
Copyright (c) 2007 The Thomson Corporation

FILE 'HCAPLUS' ENTERED AT 14:42:13 ON 13 JUL 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'NTIS' ENTERED AT 14:42:13 ON 13 JUL 2007
Compiled and distributed by the NTIS, U.S. Department of Commerce.
It contains copyrighted material.
All rights reserved. (2007)

FILE 'LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007
COPYRIGHT (C) 2007 Cambridge Scientific Abstracts (CSA)

```
=> s blood (a)substitute?
L1      13234 BLOOD (A) SUBSTITUTE?
```

```
=> s conjugated (a)hemoglobin?
L2      224 CONJUGATED (A) HEMOGLOBIN?
```

```
=> s hSA or (human (w)serum (w)albumin)
L3      59596 HSA OR (HUMAN (W) SERUM (W) ALBUMIN)
```

```
=> s l2 and l3
L4      5 L2 AND L3
```

```
=> dup rem l4
PROCESSING COMPLETED FOR L4
L5      4 DUP REM L4 (1 DUPLICATE REMOVED)
```

```
=> d 1-4 ibib ab
```

L5 ANSWER 1 OF 4 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2007127303 EMBASE
TITLE: Engineering blood cells and proteins as blood substitutes:
A short review.
AUTHOR: Kim H.W.
CORPORATE SOURCE: H.W. Kim, Biopure Corp., 11 Hurley Street, Cambridge, MA
02141, United States. Hae_Kim@Brown.edu
SOURCE: Biotechnology and Bioprocess Engineering, (2007) Vol. 12,
No. 1, pp. 43-47. .

Refs: 30
ISSN: 1226-8372
COUNTRY: Korea, Republic of
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 025 Hematology
027 Biophysics, Bioengineering and Medical Instrumentation
037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 30 Mar 2007
Last Updated on STN: 30 Mar 2007
AB In this brief review, basic principles and recent progresses on the development of therapeutic substitutes for major blood components are briefly discussed with primary focus on the red cell substitute. .COPYRGT. KSBB.

L5 ANSWER 2 OF 4 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
ACCESSION NUMBER: 2006:86173 BIOSIS
DOCUMENT NUMBER: PREV200600077521
TITLE: Extreme hemodilution with PEG-hemoglobin vs. PEG-albumin.
AUTHOR(S): Cabrales, Pedro [Reprint Author]; Tsai, Amy G.; Winslow, Robert M.; Intaglietta, Marcos
CORPORATE SOURCE: La Jolla Bioengn Inst, 505 Coast Blvd S, Suite 405, La Jolla, CA 92037 USA
pcabrales@ucsd.edu
SOURCE: American Journal of Physiology - Heart and Circulatory Physiology, (DEC 2005) Vol. 289, No. 6, pp. H2392-H2400.. ISSN: 0363-6135.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 25 Jan 2006
Last Updated on STN: 25 Jan 2006

AB Isovolemic hemodilution to 11% systemic hematocrit was performed in the hamster window chamber model using 6% dextran 70 kDa (Dx 70) and 5% human serum albumin (HSA). Systemic and microvascular effects of these solutions were compared with polyethylene glycol (PEG)-conjugated 5% albumin (MPA) and PEG-conjugated 4.2% Hb (MP4). These studies were performed for the purpose of comparing systemic and microvascular responses of PEG vs. non-PEG plasma expanders and similar oxygen-carrying vs. noncarrying blood replacement fluids. Mean arterial blood pressure was statistically significantly reduced for all groups compared with baseline ($P < 0.05$), HSA, MPA, and MP4 higher than Dx 70 ($P < 0.05$). MP4 and MPA had a significantly higher cardiac index than HSA and Dx 70, in addition to a positive base excess. Microvascular blood flow and capillary perfusion were significantly higher for the PEG compounds compared with HSA and Dx 70. Intravascular PO₂ for MP4 and MPA was higher in arterioles ($P < 0.05$) compared with HSA and Dx 70, but there was no difference in either tissue or venular PO₂ between groups. Total Hb in the MP4 group was 4.8 +/- 0.4 g/dl, whereas the remaining groups had a range of 3.6-3.8 g/dl. The hemodilution results showed that PEG compounds maintained microvascular conditions with lower concentrations than conventional plasma expanders. Furthermore, microvascular oxygen delivery and extraction in the window chamber tissue were significantly higher for the PEG compounds. MP4 was significantly higher than MPA ($P < 0.05$) and was not statistically different from baseline, an effect due to the additional oxygen release to the tissue by the Hb MP4.

L5 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:571260 HCAPLUS
DOCUMENT NUMBER: 143:90623
TITLE: Conjugate of bovine hemoglobin and human

serum albumin as a candidate for
blood substitute: Characteristics and effects on rats
AUTHOR(S): Lu, Xiu-Ling; Zheng, Chun-Yang; Shi, Xiao-Dong; Wang,
Yong-Quan; Suo, Xiao-Yan; Yu, Peng-Zhan; Xu, Yu-Hong;
Ma, Tie-Min; Su, Zhi-Guo
CORPORATE SOURCE: National Key Laboratory of Biochemical Engineering,
Institute of Process Engineering, Chinese Academy of
Sciences, Beijing, Peop. Rep. China
SOURCE: Artificial Cells, Blood Substitutes, and Biotechnology
(2005), 33(2), 83-99
CODEN: ACBSDA
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Conjugate of bovine Hb (bHb) and human serum
albumin (HSA) was prepared. The product was simply
composed of 89.7% one-to-one Hb-HSA conjugate, 6.0% oligomer of
Hb and HSA, 3.5% unconjugated HSA and 0.8%
unconjugated Hb, with an average mol. weight of 157 kD. The physicochem.
characteristics were determined. Effects of single replacement on blood
pressure and long-term survival of rats with 30% and 60% acute blood loss
were studied, in comparison with Ringer-lactate solution, stroma-free Hb
(SFHb), 5% HSA in Ringer-lactate, whole blood and no
resuscitation fluid. Results showed that Hb-HSA conjugate
maintained the mean arterial pressure of rats to initial level with no
pressor effect. Long-term effects of the replacement fluids on 30%
bleeding rats showed that, for the group infused with Hb-HSA
conjugate, histol. of five major organs, heart, kidney, liver, spleen and
lung, were essentially normal, similar to that of whole blood, while
obviously. Renal side-effects appeared in other groups. The efficacy of
the conjugate was further demonstrated by the resuscitation of lethal
hemorrhagic shock rats (60% acute blood loss) with 100% survival rate
(followed for 14 days), the same result as whole blood. The Hb-
HSA conjugate can thus be another candidate for blood substitute
in emergency.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
DUPLICATE 1

ACCESSION NUMBER: 2000:119605 BIOSIS
DOCUMENT NUMBER: PREV200000119605
TITLE: Synthesis and physicochemical characterization of a series
of hemoglobin-based oxygen carriers: Objective comparison
between cellular and acellular types.
AUTHOR(S): Sakai, Hiromi; Yuasa, Minako; Onuma, Hiroto; Takeoka,
Shinji; Tsuchida, Eishun [Reprint author]
CORPORATE SOURCE: Department of Polymer Chemistry, Advanced Research
Institute for Science and Engineering, Waseda University,
Tokyo, 169-8555, Japan
SOURCE: Bioconjugate Chemistry, (Jan.-Feb., 2000) Vol. 11, No. 1,
pp. 56-64. print.
CODEN: BCCHE5. ISSN: 1043-1802.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Mar 2000
Last Updated on STN: 3 Jan 2002

AB A series of hemoglobin (Hb)-based O₂ carriers, acellular and cellular
types, were synthesized and their physicochemical characteristics were
compared. The acellular type includes intramolecularly cross-linked Hb
(XLHb), polyoxyethylene (POE)-conjugated pyridoxalated Hb (POE-PLP-Hb),
hydroxyethylstarch-conjugated Hb (HES-XLHb), and glutaraldehyde-
polymerized XLHb (Poly-XLHb). The cellular type is Hb-vesicles (HbV) of
which the surface is modified with POE (POE-HbV). Their particle

diameters are 7 +- 2, 22 +- 2, 47 +- 17, 68 +- 24, and 224 +- 76 nm, respectively, thus all the materials penetrate across membrane filters with 0.4 μ m pore size, though only the POE-HbV cannot penetrate across the filter with 0.2 μ m pore size. These characteristics of permeability are important to consider an optimal particle size in microcirculation in vivo. POE-PLP-Hb ((Hb) = 5 g/dL) showed viscosity of 6.1 cP at 332 s⁻¹ and colloid osmotic pressure (COP) of 70.2 Torr, which are beyond the physiological conditions (human blood, viscosity = 3-4 cP, COP = ca. 25 Torr). XLHb and Poly-XLHb showed viscosities of 1.0 and 1.5 cp, respectively, which are significantly lower than that of blood. COP of POE-HbV is regulated to 20 Torr in 5% human serum albumin (HSA). HES-XLHb and POE-HbV/HSA showed comparable viscosity with human blood. Microscopic observation of human red blood cells (RBC) after mixing blood with POE-PLP-Hb or HES-XLHb disclosed aggregates of RBC, a kind of sludge, indicating a strong interaction with RBC, which is anticipated to modify peripheral blood flow in vivo. On the other hand, XLHb and POE-HbV showed no rouleaux or aggregates of RBC. The acellular Hbs (P50 = 14-32 Torr) have their specific O₂ affinities determined by their structures, while that of the cellular POE-HbV is regulated by coencapsulating an appropriate amount of an allosteric effector (e.g., P50 = 18, 32 Torr). These differences in physicochemical characteristics between the acellular and cellular types indicate the advantages of the cellular type from the physiological points of view.

=> d his

(FILE 'HOME' ENTERED AT 14:41:29 ON 13 JUL 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007

L1 13234 S BLOOD (A)SUBSTITUTE?
 L2 224 S CONJUGATED (A)HEMOGLOBIN?
 L3 59596 S HSA OR (HUMAN (W)SERUM (W)ALBUMIN)
 L4 5 S L2 AND L3
 L5 4 DUP REM L4 (1 DUPLICATE REMOVED)

=> s albumin (w)hemoglobin (w)conjugat?

L6 2 ALBUMIN (W) HEMOGLOBIN (W) CONJUGAT?

=> d 1-2 ibib ab

L6 ANSWER 1 OF 2 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002420677 EMBASE

TITLE: A solid phase adsorption method for preparation of bovine serum albumin-bovine hemoglobin conjugate.

AUTHOR: Hu T.; Su Z.

CORPORATE SOURCE: Z. Su, National Lab. Biochemical Eng., Institute of Process Engineering, Chinese Academy of Sciences, P.O. Box 353, Beijing 100080, China. zgsu@home.ipe.ac.cn

SOURCE: Journal of Biotechnology, (13 Feb 2003) Vol. 100, No. 3, pp. 267-275. .
 Refs: 17

ISSN: 0168-1656 CODEN: JBITD4

PUBLISHER IDENT.: S 0168-1656(02)00246-8

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 004 Microbiology
 027 Biophysics, Bioengineering and Medical Instrumentation

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 12 Dec 2002
Last Updated on STN: 12 Dec 2002

AB A solid phase adsorption method was proposed to prepare well-defined bovine serum albumin-bovine hemoglobin (Hb) conjugate. After adsorption by the solid phase, Q Sepharose Fast Flow media, bovine serum albumin (BSA) molecules were allowed to react with glutaraldehyde. The spacing out of BSA molecules on the solid phase was assumed to limit polymerization of BSA molecules, except some molecules bound closely on the solid phase resulting in minor dimer formation. Following the elution procedure, the activated monomeric BSA was separated from the dimers by gel filtration chromatography on Superdex 200 and then reacted with bovine Hb at 4°C and pH 9.5. The 1:1 (BSA:Hb) conjugate was obtained with the yield of 64%. The P(50) values of the conjugates, prepared under anaerobic and aerobic conditions, were 19.1 and 14.2 mmHg, respectively. The dependence of the P(50) on chloride ions for the conjugate was slightly diminished, presumably due to covalent attachment of BSA to bovine Hb. .COPYRGT. 2002 Elsevier Science B.V. All rights reserved.

L6 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:872226 HCAPLUS

DOCUMENT NUMBER: 138:270350

TITLE: A solid phase adsorption method for preparation of bovine serum albumin-bovine hemoglobin conjugate

AUTHOR(S): Hu, Tao; Su, Zhiguo

CORPORATE SOURCE: Institute of Process Engineering, National Laboratory of Biochemical Engineering, Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China

SOURCE: Journal of Biotechnology (2003), 100(3), 267-275
CODEN: JBITD4; ISSN: 0168-1656

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A solid phase adsorption method was proposed to prepare well-defined bovine serum albumin-bovine Hb conjugate. After adsorption by the solid phase, Q Sepharose Fast Flow media, bovine serum albumin (BSA) mols. were allowed to react with glutaraldehyde. The spacing out of BSA mols. on the solid phase was assumed to limit polymerization of BSA mols., except some mols. bound closely on the solid phase resulting in minor dimer formation. Following the elution procedure, the activated monomeric BSA was separated from the dimers by gel filtration chromatog. on Superdex 200 and then reacted with bovine Hb at 4 °C and pH 9.5. The 1:1 (BSA:Hb) conjugate was obtained with the yield of 64%. The P50 values of the conjugates, prepared under anaerobic and aerobic conditions, were 19.1 and 14.2 mmHg, resp. The dependence of the P50 on chloride ions for the conjugate was slightly diminished, presumably due to covalent attachment of BSA to bovine Hb.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 14:41:29 ON 13 JUL 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007

L1 13234 S BLOOD (A)SUBSTITUTE?
L2 224 S CONJUGATED (A)HEMOGLOBIN?
L3 59596 S HSA OR (HUMAN (W)SERUM (W)ALBUMIN)
L4 5 S L2 AND L3
L5 4 DUP REM L4 (1 DUPLICATE REMOVED)
L6 2 S ALBUMIN (W)HEMOGLOBIN (W)CONJUGAT?

=> e su z/au

E1 1 SU YVONNE C E/AU

E2	7	SU YVONNE C F/AU
E3	909 -->	SU Z/AU
E4	11	SU Z A/AU
E5	278	SU Z B/AU
E6	28	SU Z C/AU
E7	85	SU Z D/AU
E8	49	SU Z F/AU
E9	194	SU Z G/AU
E10	117	SU Z H/AU
E11	1	SU Z I FEN/AU
E12	49	SU Z J/AU

=> s e3

L7 909 "SU Z"/AU

=> e Xiuling l/au

E1	1	XIULING H/AU
E2	1	XIULING JIN/AU
E3	7 -->	XIULING L/AU
E4	1	XIULING LI/AU
E5	1	XIULING LIN/AU
E6	1	XIULING W/AU
E7	3	XIULING WANG/AU
E8	2	XIULING X/AU
E9	2	XIULING XU/AU
E10	1	XIULING XUE/AU
E11	1	XIULING Z/AU
E12	1	XIULONG/AU

=> s e3

L8 7 "XIULING L"/AU

=> e chunyang z/au

E1	2	CHUNYANG LIU/AU
E2	1	CHUNYANG LU/AU
E3	0 -->	CHUNYANG Z/AU
E4	1	CHUNYAO T/AU
E5	1	CHUNYAO WU/AU
E6	1	CHUNYAYEV OLEG NIKOLAYEVICH/AU
E7	1	CHUNYAYEVA LIDIYA OMOVNA/AU
E8	1	CHUNYEN P/AU
E9	1	CHUNYI GAO/AU
E10	1	CHUNYI MA/AU
E11	1	CHUNYI N/AU
E12	3	CHUNYI W/AU

=> e yuhong x/au

E1	1	YUHONG WANG/AU
E2	1	YUHONG WU/AU
E3	3 -->	YUHONG X/AU
E4	1	YUHONG Y/AU
E5	1	YUHONG Z/AU
E6	1	YUHONG ZHANG/AU
E7	1	YUHONG ZHAO/AU
E8	1	YUHOS CSABA/AU
E9	1	YUHOS R/AU
E10	1	YUHOSZ M D/AU
E11	1	YUHO CHEN/AU
E12	1	YUHO FAN/AU

=> s e3

L9 3 "YUHONG X"/AU

=> d his

(FILE 'HOME' ENTERED AT 14:41:29 ON 13 JUL 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007

L1 13234 S BLOOD (A)SUBSTITUTE?
L2 224 S CONJUGATED (A)HEMOGLOBIN?
L3 59596 S HSA OR (HUMAN (W)SERUM (W)ALBUMIN)
L4 5 S L2 AND L3
L5 4 DUP REM L4 (1 DUPLICATE REMOVED)
L6 2 S ALBUMIN (W)HEMOGLOBIN (W)CONJUGAT?
E SU Z/AU
L7 909 S E3
E XIULING L/AU
L8 7 S E3
E CHUNYANG Z/AU
E YUHONG X/AU
L9 3 S E3

=> s l7 or l8 or l9

L10 919 L7 OR L8 OR L9

=> s l2 and l10

L11 0 L2 AND L10

=> d his

(FILE 'HOME' ENTERED AT 14:41:29 ON 13 JUL 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007

L1 13234 S BLOOD (A)SUBSTITUTE?
L2 224 S CONJUGATED (A)HEMOGLOBIN?
L3 59596 S HSA OR (HUMAN (W)SERUM (W)ALBUMIN)
L4 5 S L2 AND L3
L5 4 DUP REM L4 (1 DUPLICATE REMOVED)
L6 2 S ALBUMIN (W)HEMOGLOBIN (W)CONJUGAT?
E SU Z/AU
L7 909 S E3
E XIULING L/AU
L8 7 S E3
E CHUNYANG Z/AU
E YUHONG X/AU
L9 3 S E3
L10 919 S L7 OR L8 OR L9
L11 0 S L2 AND L10

	Document ID	Kind Codes	Source	Issue Date	Page s	Title
1	US 2006024742 3 A1		US- PGPUB	20061102	11	Hemoglobin conjugate and the preparation method and its use

	Document ID	Kind Codes	Source	Issue Date	Page s	Title
1	US 2004025976 9 A1		US- PGPUB	20041223	57	Reduced side-effect hemoglobin compositions
2	US 2003021940 6 A1		US- PGPUB	20031127	44	Beta-2-glycoprotein is an inhibitor of angiogenesis
3	US 7211560 B2		USPAT	20070501	55	Reduced side-effect hemoglobin compositions
4	US 6670323 B1		USPAT	20031230	65	Reduced side-effect hemoglobin compositions
5	US 6458762 B1		USPAT	20021001	15	Therapeutic use of hemoglobin for preserving tissue viability and reducing restenosis
6	US 6117838 A		USPAT	20000912	12	Use of hemoglobin in the treatment of hypotension
7	US 6090779 A		USPAT	20000718	10	Use of hemoglobin to treat septic shock
8	US 6046161 A		USPAT	20000404	10	Use of hemoglobin in the treatment of cardiogenic shock
9	US 6022850 A		USPAT	20000208	10	Use of hemoglobin in the treatment of stroke
10	US 5945033 A		USPAT	19990831	65	Method for making non-crosslinked protein particles for therapeutic and diagnostic use
11	US 5900477 A		USPAT	19990504	10	Use of hemoglobin in the treatment of hemorrhagic shock
12	US 5877146 A		USPAT	19990302	10	Therapeutic use of hemoglobin in the treatment of blood vessel blockage

13	US 5773417 A		USPAT	19980630	19	Human serum albumin- porphyrin complexes with the ability to bind oxygen and therapeutic uses thereof
----	-----------------	--	-------	----------	----	--

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
14	US 5733546 A		USPAT	19980331	28	Immunochemical detection of in vivo advanced glycosylation endproducts
15	US 5712101 A		USPAT	19980127	27	Immunochemical detection of in vivo advanced glycosylation endproducts
16	US 5702704 A		USPAT	19971230	28	Antibodies to in vivo advanced glycosylation endproducts
17	US 5683887 A		USPAT	19971104	28	Immunochemical detection of in vivo advanced glycosylation endproducts
18	US 5629408 A		USPAT	19970513	28	Immunochemical isolation of in vivo advanced glycosylation endproducts
19	US 5624804 A		USPAT	19970429	29	Immunochemical detection of In vivo advanced glycosylation end products
20	US 5616311 A		USPAT	19970401	25	Non-crosslinked protein particles for therapeutic and diagnostic use
21	US 5614490 A		USPAT	19970325	11	Administration of low dose hemoglobin to increase perfusion
22	US 5512268 A		USPAT	19960430	21	Polymeric shells for medical imaging prepared from synthetic polymers, and methods for the use thereof
23	US 5510464 A		USPAT	19960423	11	Administration of low dose hemoglobin to increase perfusion

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
24	US 5508021 A		USPAT	19960416	20	Non-fluorinated polymeric shells for medical imaging
25	US 5505932 A		USPAT	19960409	21	Method for the preparation of fluorocarbon-containing polymeric shells for medical imaging
26	US 5334706 A		USPAT	19940802	11	Administration of low dose hemoglobin to increase perfusion

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 2006024742 3 A1		US- PGPUB	20061102	11	Hemoglobin conjugate and the preparation method and its use
2	US 2005004862 7 A1		US- PGPUB	20050303	21	Human serum albumin-TIMP2 fusion protein, a polynucleotide encoding the same and a method of producing the human serum albumin-TIMP2 fusion protein
3	US 2003021940 6 A1		US- PGPUB	20031127	44	Beta-2-glycoprotein is an inhibitor of angiogenesis
4	US 7163805 B2		USPAT	20070116	20	Human serum albumin-TIMP2 fusion protein, a polynucleotide encoding the same and a method of producing the human serum albumin-TIMP2 fusion protein
5	US 5945033 A		USPAT	19990831	65	Method for making non-crosslinked protein particles for therapeutic and diagnostic use
6	US 5919708 A		USPAT	19990706	14	Assay for glycated blood proteins
7	US 5733546 A		USPAT	19980331	28	Immunochemical detection of in vivo advanced glycosylation endproducts
8	US 5712101 A		USPAT	19980127	27	Immunochemical detection of in vivo advanced glycosylation endproducts
9	US 5702704 A		USPAT	19971230	28	Antibodies to in vivo advanced glycosylation endproducts

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
10	US 5683887 A		USPAT	19971104	28	Immunochemical detection of in vivo advanced glycosylation endproducts
11	US 5629408 A		USPAT	19970513	28	Immunochemical isolation of in vivo advanced glycosylation endproducts
12	US 5624804 A		USPAT	19970429	29	Immunochemical detection of In vivo advanced glycosylation end products
13	US 5616311 A		USPAT	19970401	25	Non-crosslinked protein particles for therapeutic and diagnostic use
14	US 5512268 A		USPAT	19960430	21	Polymeric shells for medical imaging prepared from synthetic polymers, and methods for the use thereof
15	US 5508021 A		USPAT	19960416	20	Non-fluorinated polymeric shells for medical imaging
16	US 5506144 A		USPAT	19960409	14	Assay for glycated blood proteins
17	US 5505932 A		USPAT	19960409	21	Method for the preparation of fluorocarbon-containing polymeric shells for medical imaging

	L #	Hits	Search Text
1	L1	35	hemoglobin adj5 HSA
2	L2	1911 06	conjugate\$2
3	L4	3529 59	blood
4	L5	17	l3 and l4
5	L3	17	l1 and l2
6	L6	1748 83	crosslink\$3
7	L7	26	l1 and l6
8	L8	1	hb-hsa
9	L9	1252 94	SU XIULING CHUNYANG YUHONG
10	L10	1	l1 and l9